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ABSTRACT

The study compared the life outcomes of four groups of graudates (N=844) from the Maryland high school class of 1981: regular education/nonvocational, regular education/vocational, special education/nonvocational, and special education/vocational. Data were analyzed to determine how special education graduates differed from regular education graduates in their achievement of life outcomes usually associated with the effectiveness of public education. The most striking finding was the lack of detectable differences between special education and regular education graduates 5 years after leaving high school. Findings indicated that special education students found jobs, left home, furthered their education, and got married at the same rates as regular education graduates. Results suggested that Maryland special education is effectively meeting the goal of equalizing the educational potential of special education graduates and that participation in special education did not lead to stigmatization or inferior instruction. (DB)

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The Effectiveness of Special Education Programs: Rethinking the Initiative

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Outcomes of Special Education: Rethinking the Initiative

Abstract

The Maryland State Department of Education, through the Divisions of Special Education and Vocational-Technical Education, compared the life outcomes of four groups of graduates from the high school Class of 1981 (regular education/nonvocational, regular education/vocational, special education/non-vocational, and special education/vocational). The data were analyzed to determine specifically how special education graduates differed from regular education graduates in their achievement of life outcomes usually associated with the effectiveness of public education.

The most striking finding was the lack of detectable differences between special education and regular education graduates five years after leaving high school. This was in spite of the fact that over 800 graduates were included in the study and the statistical power was high enough to detect very small differences that may have existed in the data.

The study shows that special education students find jobs, leave home, further their education, and get married at the same rates as regular education graduates. Five years after graduation: (a) Over 85 percent of all graduates reported being employed with an average wage of $6.18 per hour; (b) Approximately 53 percent of all graduates reported remaining at home with their parents five years after graduation; (c) Over 83 percent of all graduates reported additional education; and (d) Approximately 20 percent were married.

Such findings indicate that the Maryland's special education program is effectively meeting the goal of equalizing the educational potential of special education graduates. No evidence was found to support the argument that participation in special education leads to stigmatization or inferior instruction. The results suggest that special education students who see the program through to successful completion do benefit from the program. This supports the need for effective dropout prevention initiatives.

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Complete data reports on the regular education study groups and the special education study groups are available from the authors at the Maryland State Department of Education upon request.

The Effectiveness of Special Education Programs: Rethinking the Initiative

Introduction

There has been much recent debate among educators, state and federal administrators, parents, and university researchers about the effectiveness of special education programs and the possible stigmatization that could result from a child's participation in special education programs (Hume, 1987; Will, 1986; Lilly, 1986; Reynolds and Wang, 1986; Wang and Reynolds, 1986; Wang, Reynolds, and Walberg, 1985; Wang, 1983). This debate centers around the questions of whether current special education practices are effective and if they result in damage to the child's self-esteem that may contribute to attenuated fulfillment in adult life.

The Maryland State Department of Education, through the Divisions of Special Education and Vocational Technical Education, conducted a follow-up study of public high school graduates from the class of 1981. This study presented a snap shot of how special education graduates fared five years after completing high school as compared to regular education graduates.

Generally, the study employed a telephone survey to interview representative samples of special education and regular education graduates who had or had not participated in vocational-technical programs while in high school. For the purposes of this article, the comparisons of interest are between the regular education graduates and the special education graduates. A detailed report of all data is available from the Maryland State Department of Education upon request.

The rationale for this design was the need for benchmark educational outcomes that were free from distortions caused by changing economic and social conditions. Studies that examine only special education graduates run into a "how high is up" question. That is, after determining the observed outcomes for special education graduates, there is still the question of whether the outcomes represented what could reasonably be expected for those students.

In addition, studies that attempt to show the impact of special education programs over time by comparing outcomes for graduates from two different years encounter the problem of separating out the effects due to program impact and the effects due to changing social and economic conditions. It is not reasonable to compare educational outcomes of the Class of 1979, which entered the work force at the peak of the "baby-boom" and during an economic recession, with outcomes of the Class of 1985, which graduated at a time of economic promise and low unemployment.

The design selected for this study enabled program effectiveness and stigmatization outcomes to be defined by contrasts between special education students and those students who went through the regular curriculum. The life outcomes of the regular education graduates served as the benchmark for the outcomes of the special education graduates. Five years post-graduation was chosen as the data collection point because it seemed a sufficient passage of time to gauge the effect of public education on the graduates' life outcomes. It was also long enough for graduates to have established themselves in their communities.

METHODS

Subjects. A random sample was drawn for each of the four study groups: a) special education/vocational education graduates; b) regular education/vocational education graduates; c) special education/non-vocational education graduates; and, d) regular education/non-vocational education graduates. The sample size for $P=.05$ was determined to be 400 graduates per regular education group and 312 graduates per special education group (Krejcie and Morgan, 1971).

The obtained sample characteristics were compared with the population parameters and are presented in Table 1. When compared on sex, level of special education service, age, and school district, no deviations were detected. However, there were differences between the sample and population in the percentages of mentally retarded graduates and white graduates.

INSERT TABLE 1 ABOUT HERE

The obtained sample was smaller than the desired sample size. This was primarily due to failure to locate the non-respondents. The respondents were compared to the non-respondents on the characteristics listed above. These comparisons are presented in Table 2. The results indicated slight but significant overrepresentation of white respondents in all samples. Also, in some groups, the respondents had higher GPAs than the non-respondents.

INSERT TABLE 2 ABOUT HERE

Instrumentation. An instrument to collect data via telephone interviews was constructed. It was ten pages long, required approximately 20 minutes to complete, and contained items that possessed face validity to all samples.

The instrument addressed four major areas: a) high school program; b) post-secondary education; c) employment; and, d) self-sufficiency. Specific items concerned type of vocational training received in high school, extracurricular activities, number of weeks to first job, salary, type of job, degrees or licenses obtained, difficulties in post-secondary education, housing arrangements, martial status, contacts with public agencies, and reliance on public assistance programs.

Data Collection. Two sources of data were used. Data regarding graduate name and last known address were obtained from state computer files. Graduate post-secondary data were collected via telephone interviews.

Data collection was coordinated by the University of Maryland. Three graduate students, supervised by university personnel, conducted the interviews. They received training in telephone interview procedures and were instructed in methods for probing the case of ambiguous responses. Interviewers were instructed to refer each subject who refused to participate in the study to the supervisor who would make one additional attempt to elicit the subject's participation. Cases were considered inaccessible if the subject refused to participate twice, could not be reached by phone (e.g., deceased, incarcerated), or was at an unknown address.

DATA ANALYSIS AND RESULTS

The data were analyzed using SPSS (Nies, Hull et al., 1975) on an HP 3000. The comparisons were made using cross tabulation analysis for nominal and ordinal data and ANOVA for interval level data. The chi-squared statistics were computed by hand using the information provided from the three-way cross tabulation analysis performed via SPSS. This was necessary because SPSS treats a three-way CROSSTABS problem as two independent two-way cross tabulation tables. The format and statistics were inappropriate for the comparisons required in this study; however, the information provided in the tables facilitated the calculations. The chi-squared analyses are presented in Table 3.

INSERT TABLE 3 ABOUT HERE

Data were available on three areas generally considered as outcomes of secondary education: a) post-secondary education; b) employment; and c) self-sufficiency. The results will be presented in that order.

Post-secondary Education. Chi-squared analysis revealed group differences regarding graduates who pursued further education ($\underline{X}^2$= 31.89, $\underline{df}$=3; $\underline{P} \leq .05$). Inspection indicated the difference was due to curriculum. that is, 83.6 percent of the students who pursued a non-vocational curriculum acquired additional education compared to 68.3 percent of the students who pursued a vocational curriculum. However, there did not seem to be a significant difference in proportion between special education graduates (72.8 percent) and regular education graduates (79.9 percent).

This pattern was repeated for the number of high school graduates that completed a bachelor degree program ($\underline{X}^2$= 42.9, $\underline{df}$=3; $\underline{P} \leq .05$). Non-vocational graduates received four-year college degrees more frequently (25 percent) than vocational graduates (9 percent), while no significant differences were observed between special education graduates (14 percent) and regular education graduates (21 percent). This pattern was not apparent in the percentage of graduates who earned two-year degrees. No significant differences were observed across the groups ($\underline{X}^2$=7.36, $\underline{df}$=3; $\underline{P} > .05$), 5 percent of whom obtained two-year degrees.

Another indicator of the effectiveness of secondary preparation was the difference in the post-secondary program dropout rate across the groups. The differences were not significant ($\underline{X}^2$= 5.73, $\underline{df}$=3; $\underline{P}>.05$). Approximately 23 percent of the graduates who pursued further education reported terminating the program prior to completion. The chi-squared statistic was computed by comparing the number of graduates who pursued further education but did not complete the program to all high school graduates who pursued additional education after high school.

Data were available pertaining to the reasons graduates dropped out of post-secondary education programs. No significant differences were found among the groups on the following reasons for prematurely terminating the programs: a) satisfied training needs (12 percent) ($\underline{X}^2$=7.33, $\underline{df}$=3; $\underline{P}$ >.05); b) obtained employment (28 percent) ($\underline{X}^2$=7.14, $\underline{df}$=3; $\underline{P}$>.05); and c) lack of funds (21 percent) ($\underline{X}^2$= 1.51, $\underline{df}$=3; $\underline{P}$>.05). Only three percent of these graduates reported prematurely terminating their post-secondary education because of academic difficulty.

The consistency of the chi-squared analyses in finding effects due to career education during high school was further observed in the ANOVA of graduate ratings of high school preparation for further education reported in Table 4. A main effect from curriculum was observed ($\underline{F}$=23.58, $\underline{df}$=1; $\underline{P}$<.001), while no main effect was found from education support ($\underline{F}$=3.08, $\underline{df}$=1; $\underline{P}$>.05). Vocational students were more satisfied with the preparation they received for a further education than were the non-vocational students. However, there was no significant difference between special education and regular education graduates.

INSERT TABLE 4 ABOUT HERE

Employment. The comparisons regarding employment outcomes were made excluding a group of graduates referred to as voluntarily unemployed. This group consisted of graduates who indicated they were unemployed because: a) they were attending a full-time educational program at the time of the interview, or b) they were married. This was based on the assumption that such an approach would result in more accurate estimates of group differences on variables such as salary. This assumption was made after an inspection of item frequencies revealed that many low salaries were reported by college attendees and that most of these college students belonged to the non-vocational graduate groups.

ANOVA revealed no significant differences among the groups regarding current wage (M=\$6.18; F=.092, df=2; $P<.05$), number of weeks to find the first job (M=8.9; F=.294; df=2; $P>.05$), and satisfaction with high school preparation for current job (M=2.1; F=2.596; df=2; $P>.05$). However, significant differences were detected regarding the number of jobs held since graduation (F=4.622, df=2; $P<.01$), reported in Table 5, and satisfaction with high school preparation for the first job (F=4.331, df=2; $P<.01$) reported in Table 6. A main effect due to curriculum was responsible for the differences observed on both variables. Vocational graduates held an average of 3.3 jobs since high school (n=348), while non-vocational graduates held an average of 3.8 jobs (n=419) (F=8.71, df=1; $P<.01$). Similarly, vocational graduates rated high school preparation for their first job more satisfactorily (M=1.96, n=348) than did the non-vocational graduates (M=2.12, n=419) (F=8.114, df=1; $P<.01$), as reported in Table 6.

INSERT TABLE 5 ABOUT HERE

INSERT TABLE 6 ABOUT HERE

The ANOVA reported in Table 7 revealed a significant difference regarding the number of months graduates were employed since high school (F=3.22, df=2; $P<.05$). This was due to a main effect from curriculum. The vocationally prepared graduates reported being employed longer (M=44.7; n=348) than the non-vocationally prepared graduates (M=41.9 n=419).

INSERT TABLE 7 ABOUT HERE

Finally, information regarding the graduates participation in a subsidized employment program was elicited. Less than seven respondents indicated that they had ever participated in such programs, and these responses were distributed across all groups. Therefore, no analysis was attempted.

Self-sufficiency. The final category of indices for outcome differences between special education graduates and regular education graduates dealt with aspects associated with finding a role in society. One such index regarded the use of community agencies after graduation. A difference was detected ($\underline{X}^2$=8.75, $\underline{df}$=3; $\underline{P}$<.05). Surprisingly, this difference was due almost entirely to the regular education/vocational graduates. Twenty-three percent of these graduates reported contacting community agencies, while 14-15 percent of the respondents from each of the other groups reported contacting agencies. This outcome was completely unexpected; the instrument was biased to pick up data regarding agencies the special education graduates might employ. An attempt to determine the agencies contacted by the regular education/vocational graduates proved futile as the majority of the responses fell into the "other" category.

No significant differences were detected regarding the extent to which the graduates perform their own housekeeping activities ($\underline{M}$=98 percent, $\underline{n}$=829) ($\underline{X}^2$=2.25, $\underline{df}$=3; $\underline{P}$>.05) or live independently of their parents or a relative of their parent's age ($\underline{M}$=46.4 percent; $\underline{n}$=829) ($\underline{X}^2$=1.67, $\underline{df}$=3; $\underline{P}$>.05). It is noteworthy that approximately 53.6 percent of all graduates were living with a parent or older relative five years after graduation from high school. This percentage is consistent with census data that indicated 53 percent of 18-25 year olds remained living at home (U.S. Census, 1985).

Approximately 85 percent of the graduates reported using their own earnings to help support themselves. No significant differences were observed across groups ($\underline{X}^2$=3.02, $\underline{df}$=3; $\underline{P}$>.05). Additionally, about 19 percent reported using a spouse's earnings to help support the family. A difference was detected among the groups ($\underline{X}^2$=13.12, $\underline{df}$= 3; $\underline{P}$<.05).

This difference was attributed to the vocational education graduates using spouse income more frequently (23 percent) than the non-vocational graduates (13 percent). The opposite effect was observed when parents' contributions were considered. The non-vocational graduates reported parent contribution more frequently (24 percent) than did the vocational graduates (12 percent) ($\underline{X}^2$=20.78, $\underline{df}$=3; $\underline{P}$<.05).

Finally, a significant difference was detected regarding marital status ($\underline{X}^2$=10.62, $\underline{df}$=3; $\underline{P}$<.05). Again, this difference was attributed to the effect of curriculum. Approximately 25.6 percent of the vocational graduates were married, while only 16.4 percent of the non-vocational graduates were married. This difference would help to explain the differences in source of income noted above. The overall marriage rate of 20 percent was consistent with U.S. census data that indicated a national marriage rate of 23.2 percent for 18-24 year olds (U.S. Census, 1985).

INTERPRETATIONS AND CONCLUSIONS

The most striking finding was the complete absence of differences among the graduates attributed to educational support. On all variables analyzed, special education graduates performed similarly to their regular education cohorts. Special education graduates from Maryland's schools go to college, get jobs, set up housekeeping, and get married at rates virtually identical to graduates who did not participate in special education. Therefore, the results of this study do not support the contention that participation in special education programs leads to stigmatization; at least not if stigmatization means a reduction in social stature or self-esteem that results in impaired development or accomplishment.

The data consistently revealed that the special education graduates responded similarly to the regular education graduates. Given that the special education graduates entered special education because academic performance was threatened due to their handicap; and given that the respondents were representative of the state special education graduate population of students served in programs from indirect support to separate day schools; these results can be interpreted to mean that the special education program is meeting the goal of helping handicapped students succeed in adult life.

This second conclusion is somewhat more difficult to defend because it rests on the confirmation of the null hypothesis. This means that this kind of evidence is subject to various interpretations. For example, no differences may be a result of sample sizes being too small.

Such criticisms are unfounded when the statistical power of the study is sufficiently high (Kraemer, 1985). Briefly, statistical power is an index of the probability that group differences would be detected if they were in fact present. Statistical power is a function of sample size and amount of difference among groups to be detected. The statistical power of the analyses in this study was computed and found to be greater than .90. This power level was sufficient to detect any true differences that may have existed in the data.

The study also provided a demographic snapshot of the accomplishments of high school graduates five years after leaving high school. Seventy-seven percent of the graduates in this study pursued some form of post-secondary education. Over 18 percent of the graduates completed four-year post-secondary programs and 5 percent completed two-year programs at the time of this study (4 1/2 years after graduation). As expected, non-vocationally prepared graduates pursued their education and received four-year degrees more often than vocationally prepared graduates.

The graduates were also satisfied with their preparation for further education. Eighty-three percent of those who pursued further education reported being very satisfied or satisfied with the preparation received in high school. Satisfaction was further explored by obtaining information about reasons graduates terminated their post-secondary education prior to completion. While 23 percent of those graduates who pursued post-secondary education prematurely ended the program, less than 3 percent reported academic difficulty as the reason. The major reasons identified for premature termination of post-secondary education included: a) obtained employment (28 percent); b) lack of funds (21 percent); and c) satisfied needs (12 percent). The post-secondary dropout rate was determined to be the same across all groups.

The employment outcomes for these graduates revealed they earned an average of $6.18 per hour and required 8.9 weeks, on the average, to find their jobs. While no differences were found among the groups on those two variables, differences which were related to the effects of vocational preparation were observed. Vocationally prepared students changed jobs less frequently, reported working for more months and appeared more

satisfied with high school preparation for their first jobs than were the non-vocationally prepared graduates. It appears from the data that these outcomes are similar for both special education vocational graduates and regular education vocational graduates. Additionally, so few graduates reported involvement in subsidized employment programs (7 graduates) that further analysis was meaningless.

The graduates appeared to be well on the way to establishing adult independence. Approximately 20 percent of all graduates were married at the time of this survey. This compares favorably with 1985 U.S. census data which indicated tha 23.2 percent of 18-24 year olds were married. A married rate difference was found between the vocationally prepared students and the non-vocationally prepared students; 25.6 percent of the first group were married and only 16.4 percent of the second. Additionally, while 85 percent of all graduates reported using their own employment to obtain income (no differnces across groups), vocationally prepared students reported using spouse income more often than non-vocationally prepared students while the opposite was reported regarding parent contributions. These findings were consistent with the observation that vocationally prepared students continue their education at lower rates than non-vocationally prepared students.

There were no differences across the groups regarding ability to perform household routines. Over 97 percent of the graduates reported doing their own housekeeping tasks.

Finally, there were no differences across groups regarding living independently of parents or older relatives. Some 53.6 percent of all graduates reported living with their parents or an older relative. This is

somewhat disheartening, but is is most likely an indication of the prevailing economic and housing market. There were no group differences, and the figure is consistent with U.S. census data that indicated 53.6 percent of all young adults between the ages of 18-24 years old live with parents or relatives.

The results reveal several patterns which are important for educators to consider. Special education graduates are more similar than dissimilar to regular graduates. They go on to school, find jobs, get married, and become independent adults at the same rate as regular education graduates. This requires a reappriasal of the contention that special education programs may be instructionally inferior and result in stigmatization.

REFERENCES

Hume, M. (1987) Will Promotes Initiatives Agains Pull-Out Programs. Education Daily, March 16, pp.2-3

Kraemer, H.C. (1985) A Strategy to Teach the Concept and Application of Power of Statistical Tests. Journal of Education Statistics, 10(3), pp.173-195.

Krejcie, R.V. and Morgan, D.W. (1970) Determining Sample Size for Research Activity. Educational and Psychological Measurement, 30, 607-610.

Lilly, S.M. (1986) The Relationship Between General and Special Education: A New Face on an Old Issue. Counterpoint, March.

Nie, N.H.; Hull, C.H.; et al. (1975) Statistical Package for the Social Sciences (Second Ed.). New York, New York: McGraw-Hill, Inc.

Reynolds, M.D. and Wang, M.C. (1986) Reflections on Research and Implications in Special Education: A Case of Disjointedness. Exceptional Children, 53(1), pp 77-78.

United States Census Bureau. (1985) Marital Status and Living Arrangements: March, 1985. Series P20, No. 410.

Wang, M.C. (1983) Development and Consequences of Students' Sense of Personal Control. In J. Levine and M. Want (Eds.) Teacher and Student Perceptions: Implications for Learning. Hillsdale, N.J., Erlbaum.

Wang, M.C. and Reynolds, M.D. (1986) Avoiding the Catch-22 in Special Education Reform. Exceptional Children, 31(6), 497-502.

Wang, M.C. and Reynolds, M.D. and Walberg, H.J. (1985) Rethinking Special Education. Paper presented at the Wingspread Conference on the Education of Students with Special Needs. Racine, Wisconsin, December 5-7.

Will, M. (1986) Educating Students with Learning Problems: A Shared Responsibility. United States Department of Education, Office of Special Education and Rehabilitation Services, November.

TABLE 1

Comparisons of Obtained Sample Characteristics to Population Parameters

Characteristic	Special Ed/ Non-Vocational		Special Ed/ Vocational		Regular Ed/ Non-Vocational		Regular Ed/ Vocational	
	Sample (n=189)	Population (N=1,604)	Sample (n=156)	Population (N=1,420)	Sample (n=215)	Population (N=27,402)	Sample (n=284)	Population (N=20,668)
Percent Female	35.4%	34.3%	34.6%	37.6%	49.1%	48.1%	56.3%	56.8%
Percent White	75.1%*	63.1%	78.6%*	63.2%	79.2%*	72.4%	80.1%*	72.8%
Percent Mentally Retarded	20.1%	19.8%	16.0%*	24.6%	----	----	----	----
Levels of Service								
Indirect	5.8%	5.9%	8.3%	5.5%	----	----	----	----
< 5 Hours	16.4%	16.3%	16.7%	16.9%	----	----	----	----
≥ 5 < 15 Hours	33.3%	32.9%	35.3%	33.2%	----	----	----	----
≥ 15 Hours	40.2%	39.0%	30.8%	33.8%	----	----	----	----
Day Program	2.6%	4.7%	7.1%	9.6%	----	----	----	----

*P ≤.05

TABLE 2

Comparisons of Respondent and Non-Respondent Characteristics

Characteristic	Special Ed/ Vocational		Special Ed/ Non-Vocational		Regular Ed/ Non-Vocational		Regular Ed/ Vocational	
	Resp (n=156)	Non-Resp (n=238)	Resp (n=189)	Non-Resp (n=225)	Resp (n=285)	Non-Resp (n=204)	Resp (n=215)	Non-Resp (n=273)
Percent Female	34.6	38.7	35.4	37.9	49.1	41.2	56.3	55.7
Percent White	75.6	55.9*	75.1	50.2*	79.2	65.2*	80.1	73.3
GPA	2.49	2.32*	2.52	2.43	2.72	2.58*	2.52	2.29*

*P $\leq$.05

TABLE 3

Chi-Squared Analysis of Graduate Responses[a] Related to Post-Secondary Education, Employment, and Self-Sufficiency

	Non-vocational		Vocational			
	Regular Education	Special Education	Regular Education	Special Education	X^2	Sig.
Post-Secondary Education						
Pursued education	242/280	150/189	145/204	101/156	31.89	$p<.05$
Completed B.S or B.A.	80/280	38/189	22/204	10/156	42.9	$p<.05$
Completed A.A.	22/280	9/189	10/204	3/156	7.36	NS
Dropped out of program[b]	52/242	28/150	37/145	31/101	5.73	NS
Dropped out because[c]:						
Satisfied needs	4/52	7/28	2/37	5/31	7.33	NS
Obtained Employment	17/52	10/28	4/37	10/31	7.14	NS
Lack of Funds	11/52	8/28	7/37	5/31	1.51	NS
Employment						
Participation in subsidized employment[d]	4/236	2/178	1/157	1/142	.11	NS
Self-sufficiency						
Contact with agencies	41/236	26/189	47/204	22/156	8.75	$p<.05$
Perform own housekeeping	278/279	187/189	200/203	154/155	2.25	NS
Live independently	138/280	86/189	99/204	68/156	1.67	NS
Income Sources						
Own employment	235/280	161/189	177/204	140/156	3.02	NS
Spouse's employment	35/280	26/189	45/204	36/156	13.12	$p<.05$
Parents or relatives	70/280	40/189	27/204	15/156	20.78	$p<.05$
Married	45/280	32/189	51/204	41/156	10.62	$p<.05$

a. Numerator represents number of respondents answering yes; denominator represents number of possible respondents
b. Denominator represents number of graduates who pursued post-secondary education
c. Denominator represents number of graduates who left post-secondary education
d. Denominator represents number of graduates who were not voluntarily unemployed

TABLE 4

Analysis of Variance of Graduate Ratings of
High School Preparation for Post-Secondary Education

Source	DF	MS	F	Sig.
Main Effects	2	12.86	13.56	.000
Instructional Support	1	3.09	3.26	.072
Career Preparation	1	22.37	23.88	.000
Instructional Support X Career Preparation	1	.56	.59	.444

TABLE 5

Analysis of Variance of Number of Jobs Held
Since Graduation by Graduates Not Voluntarily Unemployed

Source	DF	MS	F	Sig.
Main Effects	2	25.438	4.622	.01
Instructional Support	1	2.246	.408	.523
Career Preparation	1	48.273	8.771	.003
Instructional Support X Career Preparation	1	.028	.005	.943

TABLE 6

Analysis of Variance of Graduate Ratings of High School Preparation for First Job (Excluding Voluntarily Unemployed Graduates)

Source	DF	MS	F	Sig.
Main Effects	2	2.571	4.337	.014
Instructional Support	1	.286	.483	.488
Career Preparation	1	4.815	8.114	.005
Instructional Support X Career Preparation	1	.838	1.412	.235

TABLE 7

Analysis of Variance of Months Employed of Graduates
(Excluding Voluntarily Unemployed)

Source	DF	MS	F	Sig.
Main Effects	2	758.083	3.217	.041
Instructional Support	1	.048	.000	.989
Career Preparation	1	1514.154	6.426	.011
Instructional Support X Career Preparation	1	46.316	.197	.658